

FACT SHEET

**DRAFT HMWA/RCRA PARTIAL PERMIT
Calcined Solids Storage Facility (CSSF)
Located at the Idaho Nuclear Technology and Engineering Center (INTEC)
Idaho National Laboratory (INL)
EPA ID NO. ID4890008952**

The purpose of this fact sheet is to set forth the principal facts pertaining to a draft Partial Permit (Permit) that the Idaho Department of Environmental Quality (DEQ) is proposing to issue to the United States Department of Energy (DOE) and DOE contractor/operators (Permittee) at the Idaho National Laboratory (INL). The Permit will allow for the operation of mixed waste storage units at the Idaho Nuclear Technology and Engineering Center (INTEC), located on INL, in Butte, Idaho.

This fact sheet was prepared in accordance with the requirements of the *Rules and Standards for Hazardous Waste*, IDAPA 58.01.05.000 et seq., specifically, IDAPA§ 58.01.05.013 [40 CFR §124.8].

A. PURPOSE OF THE PERMITTING PROCESS

The purpose of the permitting process is to design specific administrative and operational requirements under which the Permittee will operate to comply with the Idaho Hazardous Waste Management Act of 1983 (HWMA), as amended, and regulations promulgated there under by DEQ.

DEQ is required to prepare a draft permit that sets forth, in one concise document, all the applicable requirements with which DEQ intends to require the Permittee to comply during the ten (10) -year duration of the Partial Permit. The public is given forty-five (45) calendar days to review and comment on the draft permit conditions before DEQ takes any final action (issue or deny) on the Permit. This draft Permit was prepared based upon a Part B Application for storage units within INTEC.

B. PROCEDURES FOR REACHING A FINAL DECISION

IDAPA 58.01.05.013 [40 CFR § 124.10] requires that the public be given forty-five (45) calendar days to comment on the draft Permit prepared under the HWMA. The comment period will begin on August 11, 2006, and will end on September 25, 2006. Any person interested in commenting on this draft Permit must do so within this forty-five (45) -calendar day comment period. The Permit, in its entirety, is open for public comment.

All persons wishing to comment on the proposed Partial Permit must submit the comments in writing to:

*Mr. Robert Bullock
c/o Ms. Teri Gregory
Waste Management and Remediation Division
Idaho Department of Environmental Quality
1410 North Hilton
Boise, ID 83706-1255
(208) 373-0502*

Comments should include all reasonable available references, factual grounds, and supporting material. All conditions in this draft Permit are open for public comment.

Opportunity for a public hearing may be provided if signed, written requests, in accordance with IDAPA 58.01.05.013 [40 CFR §124.11], for a hearing are submitted personally or are addressed to the aforementioned and received at or before 5:00 p.m., September 25, 2006.

If sufficient public interest in holding a public hearing is expressed, then a formal public hearing will be held. The decision on whether there is sufficient public interest in holding the hearing will be based on the receipt of written comments and requests for a public hearing.

When making the final determination regarding the approval of this Partial Permit, DEQ will consider all written comments received during the public comment period, those received during the public hearing (if

held), the requirements of the hazardous waste regulations of IDAPA 58.01.05.000 *et seq.*, and all other applicable federal, state, or local laws.

Comments should identify all reasonable available references, factual grounds, and supporting material.

C. FACILITY/UNIT DESCRIPTION

INL is a large (approximately 890 square miles), DOE-owned facility, co-operated by DOE and various contractors and located in Bingham, Butte, and Jefferson Counties, Idaho. Activities at INL generate a wide variety of hazardous and mixed (both radioactive and hazardous) wastes, which are subject to regulation under HWMA. Hazardous/mixed waste management activities include container storage, tank storage, miscellaneous storage, and a variety of treatment processes. There are approximately 130 units that have been identified for HWMA permit actions.

This draft Partial Permit is for less than the entire facility in that it does not address all of the INL Hazardous Waste Management Units that require hazardous waste permits. This Partial Permit only addresses the **Calcined Solids Storage Facility (CSSF)**. The CSSF operates at INTEC which is located in the south-central portion of INL and is operated for DOE by the CH2M-WG Idaho, LLC. The CSSF consists of seven (7) units permitted for the storage of dry mixed wastes in tank systems. For the purposes of this permit CSSF tank systems are called bin sets. Bin Sets 1 through 7 are used to store spent radioactive material at the INL. The radioactive material has been combined with calcium and other inert materials to form a dry granular substance, called calcine that is easier to store. The Bin sets were constructed to facilitate handling this material and provide for safe long-term storage. All of the bin sets are similar in manner of construction. Each has a large concrete vault buried below or partially below ground, inside of which individual stainless steel bins have been placed that serve as the actual storage vessels. Each of the bins have been secured to the floor of the concrete vault with anchor bolts. Each bin set contains between three and seven stainless-steel bins.

Variances in the Permit with justifications

WAIVERS:

Waiver 1: **Secondary containment IDAPA 58.01.05.008 [40 CFR § 264.193(d)]:** The concrete vaults do not meet secondary containment requirements in that the interior walls do not have an impermeable coating nor do the exterior walls have an external moisture barrier. Due to the physical characteristics of the waste - stable granular solids only and location characteristics area - dry desert with an average of 8.5 inches of precipitation annually the variance requirements of IDAPA 58.01.05.008 [40 CFR § 264.193(g)] have been met.

Waiver 2: **Inspections: IDAPA 58.01.05.008 [40 CFR § 264.195]:** Due to the extreme radiological and physical hazards associated with these units, weekly physical inspections of vault interiors and tanks within the vault will not be possible. All inspections for external portions of the tank systems and/or vaults will be conducted.

ADDITIONAL PERMIT CONDITIONS:

Condition 1: DOE will be required to conduct structural level inspections on CSSF # 7 at a minimum annually and post earthquake, flood or other natural disaster that may impair the integrity of the vault and/or the bins. The results of these inspections are intended to be an indication of the integrity of vaults that are inaccessible due to radiological and physical hazards.

Condition 2: DOE will be required to conduct and record an annual visual inspection on all bin set/vaults annually by using a video camera.

Condition 3: DOE will be required to conduct a five year reopener of this permit to review and incorporate updated regulations information and technology concerning the management of calcined wastes.

D. CORRECTIVE ACTION DETERMINATION

Idaho Code § 39-4409(5) requires, in accordance with IDAPA §58.01.05.008 [40 CFR § 264.101(a)], the owner/operator of a hazardous waste facility to institute corrective action as necessary to protect human health and the environment for all releases of hazardous wastes and hazardous constituents from any Solid Waste Management Unit (SWMU) at the facility, regardless of the time at which the waste was placed in such unit, IDAPA 58.01.05.008 [40 CFR Part 264].

On December 9, 1991, DOE, the U.S. Environmental Protection Agency, and the State of Idaho, through the Department of Health and Welfare, signed a Federal Facilities Agreement/Consent Order (FFA/CO). Under the FFA/CO, oversight of investigations and corrective action shall be addressed pursuant to Section 120(e)(2) of the Comprehensive Environmental Response, Compensation, and Liability Act (a.k.a. CERCLA or "Superfund"), 42 U.S.C. § 9620(e), as amended.

E. PARTIAL PERMIT ORGANIZATION

The Partial Permit is divided into four (4) Modules that reference nine (9) Attachments as follows:

MODULE	TITLE
I	STANDARD PERMIT CONDITIONS
II	GENERAL FACILITY CONDITIONS
III	TANK STORAGE
IV	CORRECTIVE ACTION

ATTACHMENT	TOPIC
1	FACILITY AND UNIT DESCRIPTIONS
2	FACILITY AND UNIT WASTE ANALYSIS PLAN
3	SECURITY
4	INSPECTION PROCEDURES
5	PERSONNEL TRAINING
6	PREPAREDNESS AND PREVENTION
7	CONTINGENCY PLAN
8	CLOSURE PLAN
9	PERMIT REVISION LOG